

PROJECT DESCRIPTION

GENERAL

This project involves the modification of an existing traffic control signal at the intersection of MD 201 and Cherrywood Lane in Prince George's County. MD 201 is considered to run in a north/south direction.

INTERSECTION OPERATION (To remain)

This intersection currently operates in NEMA four (4) phase, full-traffic-actuated mode. There is an exclusive/permissive left turn phase for the northbound movement of MD 201 through movements operate concurrently. The Cherrywood Lane movement operates alone for the east movement. An eight phase, full-traffic-actuated, system ready solid state base mounted cabinet and controller is to be installed at this location.

EQUIPMENT LIST "B"

Equipment to be furnished and installed by the Contractor.  
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Specifications			
Quantity	Units	Section	Description
LUMP SUM	LS	108	Mobilization
LUMP SUM	LS	104	Maintenance of traffic
2	CY	205	Test pit excavation
4	EA	811	Handhole
255	LF	815	Sawcut for signal loop detector
475	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.)
185	LF	810	5-conductor electrical cable (No. 14 A.W.G.)
1,200	LF	810	7-conductor electrical cable (No. 14 A.W.G.)
165	LF	810	3-wire (No. 4 A.W.G.) electrical cable
50	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.)
2,400	LF	810	2-conductor electrical cable (No. 14 AWG aluminum shielded)
18	LF	805	1 in. liquid light flexible non-metallic conduit for loop detector sleeve.
90	LF	805	3 in. polyvinylchloride (Schedule 80) electrical conduit - bored.
45	LF	805	2 in. polyvinylchloride (Schedule 80) electrical conduit - trenched
60	LF	805	3 in. polyvinylchloride (Schedule 80) electrical - trenched
90	LF	805	4 in. polyvinylchloride (Schedule 80) electrical conduit - trenched
5	CY	801	Concrete foundation for traffic signal equipment.
2	EA	804	Ground rod 3/4 in. diameter x 10 ft. length.
1	EA	807	Control and distribution equipment (120/240 V, one phase, three wire system) for underground electrical service.
150	LF	555	5 in. white pavement marking tape.
52	LF	555	5 in. white pavement marking tape.
220	LF	555	5 in. yellow pavement marking tape.
72	LF	555	24 in. wide pavement marking - white for stop line.
1	LS	SP1	As-Build for SHA USE EXISTING DISK.
1	EA	SP	27 ft. steel pole with Twin 50'x50' mast arm (Note: four 1-3/4x90 in. anchor bolts)
1	EA	814	System ready base mounted cabinet with Controller and three (3) four channel rack mounted amplifiers.
3	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GAI) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
77.5	SF	813	R3-5R (1-EACH) - with mast arm mounting hardware D3-2 (1-EACH) - 16 in. x Var. (Cherrywood Lane) with mast arm mounting hardware. R3-5L (1-EACH) - with mast arm mounting hardware R10-12 (1-EACH) - with mast arm mounting hardware R4-7 (1-EACH) - post mounted hardware. D3-2 (1-EACH) - 12 in. x Var. (Cherrywood Lane) - wood post mounted. Shield assembly (36 in. x 51 in.) - pole mount hardware. Shield assembly (36 in. x 51 in.) - pole mount hardware. Cut , Clean and cap Mast Arm from 50' to 40' Length.
1	EA		
1	EA	806	15' Lighting Bracket Arm.
1	EA	806	250 watt HPSV Luminaire and lamp w/photo cell.
320	LF		Grind & remove Pavement marking (hatching).

EQUIPMENT LIST "C"

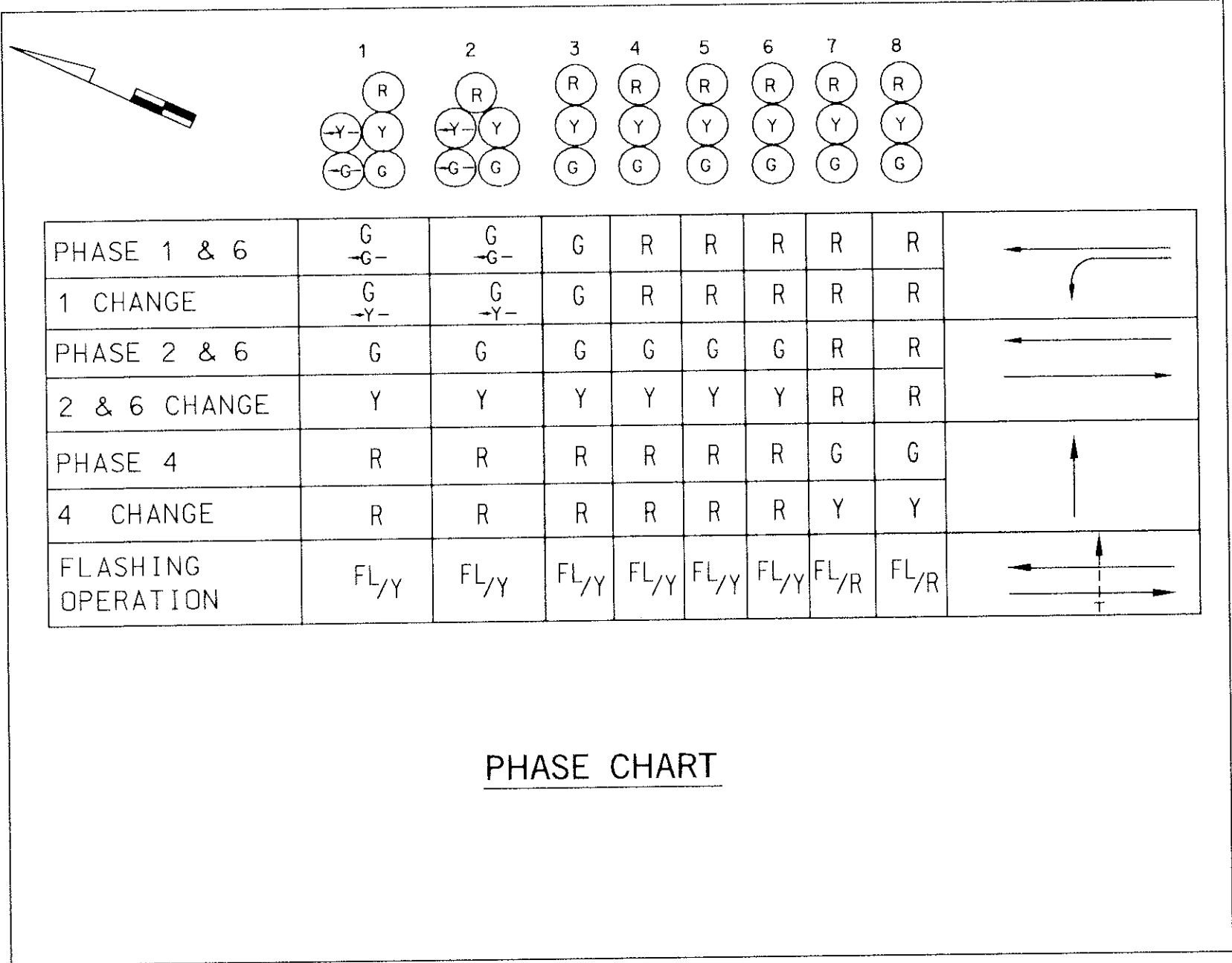
Existing equipment to be removed by the Contractor and delivered to the State Highway Administration, 7941 Connelley Drive, Hanover, Maryland, 21076.

Quantity	Units	Description
1	EA	Pole mounted cabinet with all internal computer equipment

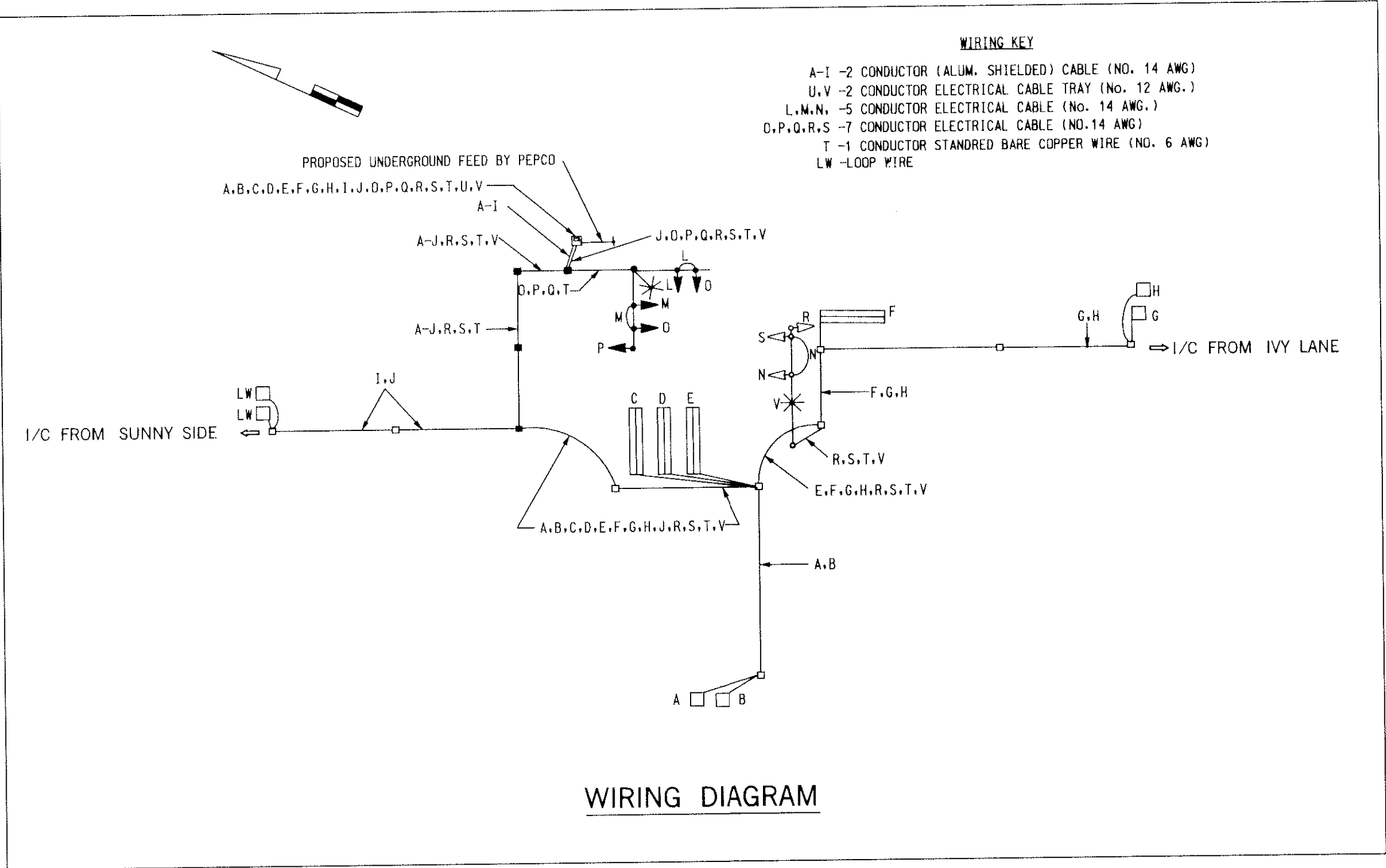
NOTE:  
1. All equipment to be removed and not listed above shall become the property of the Contractor.  
2. The Contractor shall notify the SHA at (410) 787-7652 at least three days in advance of delivery.

SPECIAL NOTE:

- CATALOG CUTS MUST BE SUBMITTED AND ACCEPTED BY THE OFFICE OF TRAFFIC & SAFETY FOR ALL MATERIALS PRIOR TO THEIR INSTALLATION.
- CONTROLLER AND CABINET SHALL BE DELIVERED TO THE SIGNAL OPERATIONS SECTION, ATTENTION MR. ED RODENHIZER, A MINIMUM OF 21 DAYS PRIOR TO THEIR INSTALLATION FOR WIRING AND TESTING.



PHASE CHART



WIRING DIAGRAM

USDA		WASHINGTON AREA SERVICE CENTER	
BUILDING	NAME	BELTSVILLE OFFICE COMPLEX	
	ADDRESS	STREET	
	NUMBER	BELTSVILLE M.D.	
PROJECT	DESCRIPTION	OFF-SITE ROADWAY IMPROVEMENTS	
	NUMBER	PCN: 11-ME-95	
	DATE		
DRAWING	TITLE	SIGNAL PLAN	
	TYPE	CIVIL	
	NUMBER	3	5
A-E		CONTRACT NUMBER	GS-53-3142-4-913
CONSTRUCTION		GS-	
100% SUBMISSION			
NO. REVISION DATE			
CHECK SHEET APPROVALS	CLIENT AGENCIES		
	ACC. & FIRE PREVENTION	BUILDINGS MANAGER	SPACE MANAGEMENT
	ARCHITECTURAL	STRUCTURAL	MECHANICAL
	ELECTRICAL		
GNM & ASSOCIATES, INC. CONSULTING ENGINEERS, ARCHITECTS & PLANNERS 8630 FENTON STREET, SUITE 820 SILVER SPRING, MD 20910 (301) 588-6110 FAX: (301) 588-6656			
PROFESSIONAL TRANSPORTATION CONSULTANTS 12761 TURQUOISE TERRACE, SILVER SPRING, MD 20904 TEL.* 301-236-4013			

REVISIONS	APPROVALS		MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION			
	TEAM LEADER, TEDD					
	ASST. DIVISION CHIEF, TEDD		GENERAL INFORMATION MD 201 AT CHERRYWOOD LANE LOG MILE: 16020107.92			
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION					
DIRECTOR, OFFICE OF TRAFFIC & SAFETY		DRAWN BY: YBY	F.A.P. NO. BW996M82	PLAN SHEET NO.: 3405B-GI	SHEET NO. 2 OF 2	
		CHECK BY: NONE	S.H.A. NO. PRINCE GEORGE'S			
		SCALE:	COUNTY			